

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

SAFETY DATA SHEET

Capsaicin

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Capsaicin

▼ Product no.

XPC0001

Other means of identification

EC No.: 206-969-8

CAS No.: 404-86-4

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture

Only for use in research and development

Uses advised against

No special

1.3. Details of the supplier of the safety data sheet

▼ Company and address

XP Chemistries AB

Storgatan 73F

852 33 Sundsvall

Sweden

+46 72 2500415

<https://www.xpchemistries.com/>

▼ Contact person

XP Chemistries AB

▼ E-mail

info@xpchemistries.com

SDS date

2021-08-02

SDS Version

3.0

Date of previous version

2021-02-11 (2.0)

1.4. Emergency telephone number

Giftnotrufzentrale Berlin, Emergency telephone: +49 30 19240 (day and night)

See also section 4 for first aid measures.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute Tox. 3; H301, Toxic if swallowed.

Skin Irrit. 2; H315, Causes skin irritation.

Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

Hazard pictogram(s)

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830



Signal word

Danger

▼ Hazard statement(s)

Toxic if swallowed. (H301)

Causes skin irritation. (H315)

Causes serious eye damage. (H318)

Safety statement(s)

▼ General

If medical advice is needed, have product container or label at hand. (P101)

Keep out of reach of children. (P102)

▼ Prevention

Do not eat, drink or smoke when using this product. (P270)

Wear eye protection / protective gloves / protective clothing. (P280)

▼ Response

IF SWALLOWED: Immediately call a POISON CENTER / doctor. (P301+P310)

Specific treatment (see instructions on this label). (P321)

▼ Storage

Store locked up. (P405)

▼ Disposal

Dispose of contents/container to an approved waste disposal plant. (P501)

Hazardous substances

Capsaicin

2.3. Other hazards

Additional labelling

Not applicable

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

SECTION 3: Composition/information on ingredients

▼ 3.1 Substances

Product/substance	Identifiers	% w/w	Classification	Note
Capsaicin	CAS No.: 404-86-4	95-100%	Acute Tox. 3, H301	
	EC No.: 206-969-8		Skin Irrit. 2, H315	
	REACH:		Eye Dam. 1, H318	
	Index No.:			

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

No special

SECTION 4: First aid measures

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

▼ 4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

▼ Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable

4.2. Most important symptoms and effects, both acute and delayed

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Nitrogen oxides (NO_x)

Carbon oxides (CO / CO₂).

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

▼ 6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

▼ 6.4. Reference to other sections

See section 13 on "Disposal considerations" in regard of handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

▼ 7.1. Precautions for safe handling

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

▼ 7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage class

Storage class 6.1 D (Non-combustible acutely toxic substances or substances with chronic effects)

TRGS 510 - Storage of hazardous substances in non-stationary containers

Storage temperature

No specific requirements

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

No data available

PNEC

No data available

▼ 8.2. Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

▼ Hygiene measures

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally


Use only CE marked protective equipment.

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Respiratory Equipment

Work situation	Type	Class	Colour	Standards
-	Use in fumehood	-	-	-
	Use proper protective breathing equipment in case of insufficient ventilation	Gas filter AX is recommended		


Skin protection

Work situation	Recommended	Type/Category	Standards	
	Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.	-	-	

▼ Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
	Nitrile	-	-	EN374-2	

Eye protection

Work situation	Type	Standards	
	Wear safety glasses with side shields.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form

Testing not relevant or not possible due to nature of the product.

Colour

Testing not relevant or not possible due to nature of the product.

Odour

Testing not relevant or not possible due to nature of the product.

Odour threshold (ppm)

Testing not relevant or not possible due to nature of the product.

pH

Testing not relevant or not possible due to nature of the product.

Density (g/cm³)

Testing not relevant or not possible due to nature of the product.

Viscosity

Testing not relevant or not possible due to nature of the product.

Phase changes

Melting point (°C)

Testing not relevant or not possible due to nature of the product.

Boiling point (°C)

Testing not relevant or not possible due to nature of the product.

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

Vapour pressure

Testing not relevant or not possible due to nature of the product.

Vapour density

Testing not relevant or not possible due to nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

▼ Evaporation rate (n-butylacetate = 100)

Data on fire and explosion hazards

Flash point (°C)

Testing not relevant or not possible due to nature of the product.

Ignition (°C)

Testing not relevant or not possible due to nature of the product.

Auto flammability (°C)

Testing not relevant or not possible due to nature of the product.

Explosion limits (% v/v)

Testing not relevant or not possible due to nature of the product.

Explosive properties

Testing not relevant or not possible due to nature of the product.

Oxidizing properties

Testing not relevant or not possible due to nature of the product.

Solubility

Solubility in water

Testing not relevant or not possible due to nature of the product.

n-octanol/water coefficient

Testing not relevant or not possible due to nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

▼ 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

No special

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

▼ Acute toxicity

Product/substance	Capsaicin
Test method	
Species	Mouse
Route of exposure	Oral

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

Test	LD50
Result	118,8 mg/kg
Other information	

Product/substance	Capsaicin
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	161,2 mg/kg
Other information	

Toxic if swallowed.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Other information

No special

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

and/or vPvB.

12.6. Other adverse effects

No special

SECTION 13: Disposal considerations

▼ 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 4 - Irritant (skin irritation and eye damage)

HP 6 - Acute toxicity

Avoid discharge to lakes, streams, sewers, etc.

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

07 05 13* Solid wastes containing dangerous substances

Specific labelling

Not applicable

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 - 14.4

This product is within scope of the regulations of transport of dangerous goods.

▼ ADR/RID

UN- or ID number	UN proper shipping name	Labels	Packing group	Tunnel restriction code
2811	TOXIC SOLID, ORGANIC, N.O.S.	6.1	III	2 (E)

▼ IMDG

UN- or ID number	UN proper shipping name	Labels	Packing group	EmS
2811	TOXIC SOLID, ORGANIC, N.O.S.	6.1	III	F-A, S-A

"MARINE POLLUTANT"

No

▼ IATA

UN- or ID number	UN proper shipping name	Labels	Packing group
2811	TOXIC SOLID, ORGANIC, N.O.S.	6.1	III

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

SECTION 15: Regulatory information

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions for application

People under the age of 18 shall not be exposed to this product.

Demands for specific education

No specific requirements

SEVESO - Categories / dangerous substances

Not applicable

Additional information

WGK class: WGK 3

▼ Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV)

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).

Regulation (EC) 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H301, Toxic if swallowed.

H315, Causes skin irritation.

H318, Causes serious eye damage.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

According to EC-Regulation 1907/2006 (REACH), annex II, as implemented by EC-Regulation 2015/830

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit.

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVCB = Complex hydrocarbon substance

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

The safety data sheet is validated by

EN

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: DE-en